



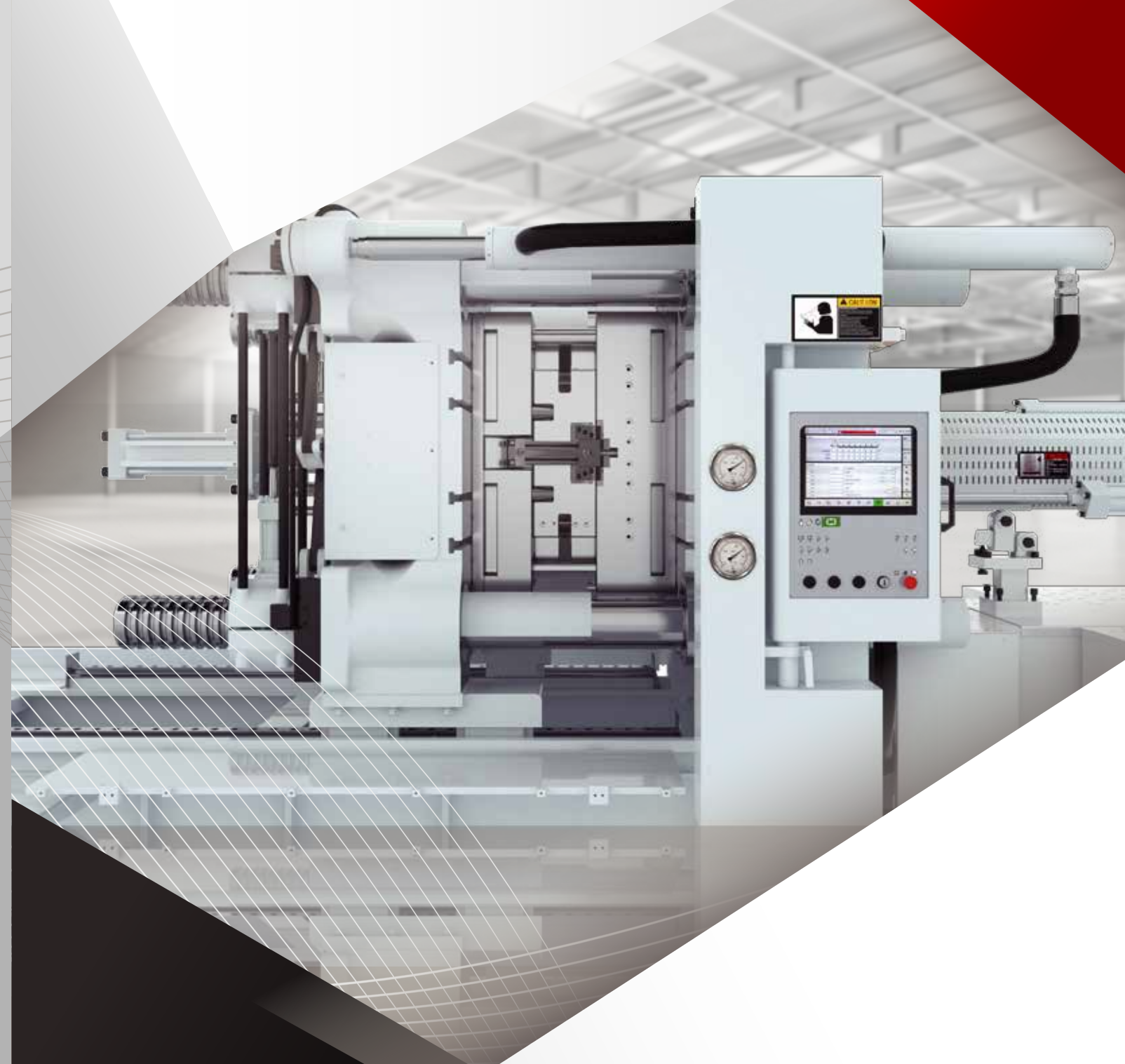
L.K. MACHINERY INTERNATIONAL LIMITED



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CAT. NO.: E20-02-14



Forza-III series

Two-Platen Energy-Saving
Servo Injection Molding Machine

Two-Platen

Energy-Saving Servo Injection Molding Machine

Forza-III series

Clamping Unit

- Non-contact tie bars with the moving platen
- Fast-moving cylinder
- Strong cast iron plates
- Precise mold guidance & platen parallelism
- Designed for low energy consumption

Injection Unit

- Single cylinder injection for higher accuracy
- Powerful injection unit with proven plasticizing system
- Quality assuring screw and barrel
- Versatile drive technology
- Ergonomics and compact machine design
- Flexibility through modularity
- Electric metering



Forza-III series

Clamping unit

Short stroke cylinder

High clamping force
Short pressure build-up time
Minimize energy consumption

Fast-moving cylinder

Arrange diagonally to allow
maximum access to the mold area

Non-contact tie bars with the moving platen

Excellent mold protection
Frictionless
Minimal contamination on molding area
Tried and trusted system

Strong cast iron platen

Excellent rigidity
Fast dry cycle time
Ejector free access from outside

Synchronized locking

Quick and precise
Short locking time

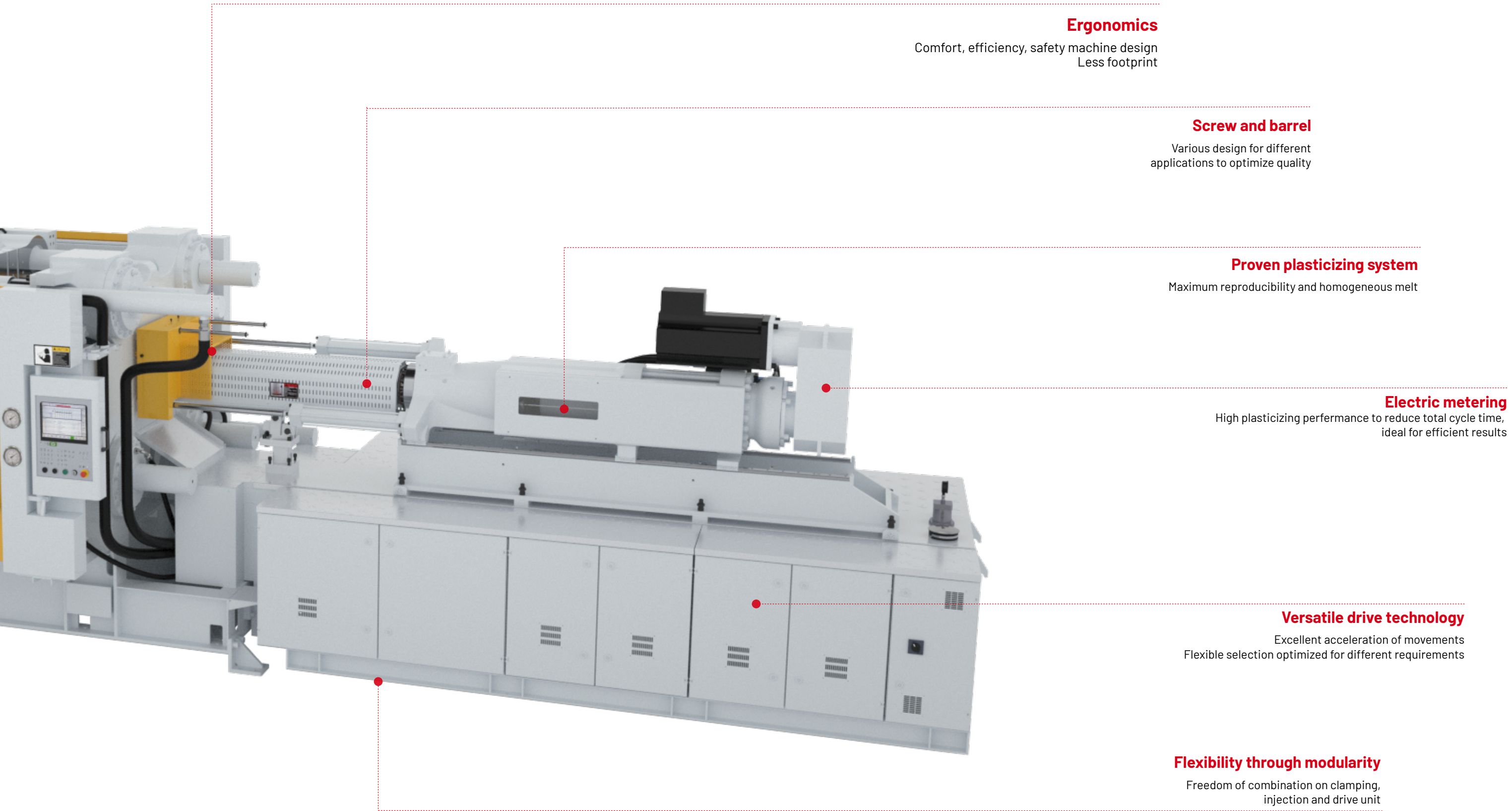
Linear guideway

Perfect platen support
Precise mold guidance and platen parallelism
Energy-efficient mold movement



Forza-III series

Injection unit



Ergonomics

Comfort, efficiency, safety machine design
Less footprint

Screw and barrel

Various design for different
applications to optimize quality

Proven plasticizing system

Maximum reproducibility and homogeneous melt

Electric metering

High plasticizing performance to reduce total cycle time,
ideal for efficient results

Versatile drive technology

Excellent acceleration of movements
Flexible selection optimized for different requirements

Flexibility through modularity

Freedom of combination on clamping,
injection and drive unit

Application

A versatile and efficient solution for large parts

LK's two-platen energy-saving servo machine Forza combined the design of machine operating, hydraulic and control all-in-one. The compact Forza two-platen injection molding machine will let you enjoy the freedom of small footprint, multi-functional process capability, tons of application-orientated add-on modules which sophisticated processors are seeking.

It performs flexible and modular machine clamping and injection matrix including plug and play modules perfect for diverse markets and applications. Thanks to servo pump technology to large tonnage two-platen platforms, resulting in excellent cycle time in a tremendous energy-saving.

With its flexible layout and compact size, the Forza integrates ideally with your production. No matter whether you produce large parts, manufacture highly sophisticated components for the automotive industry or absolutely need a perfect surface for your high-tech products.

LK - Ahead of the curve

The future of injection molding machine is incentive and challenging, thanks to the advanced of technology and the continual development of better material. LK aim to offer unique advantages and benefits for specific applications. Hence, we are constantly working to develop new-technology together with you. With the benefit of that, you can achieve the goals of cost-effective solution for efficient manufacturing, perfect surfaces and material combinations.

- Improved, light-weight materials and automated systems are reducing costs and streamlining processes.
- Customization features are allowing us to utilize precision technology to create quality pieces to exact specifications.
- Increased awareness of climate change and other environmental factors will continue to drive demand for more eco-friendly materials, such as recycled, reclaimed and renewable plastics.

Automotive industry



Home appliance industry



Sanitation industry



Logistics industry



SPECIFICATIONS

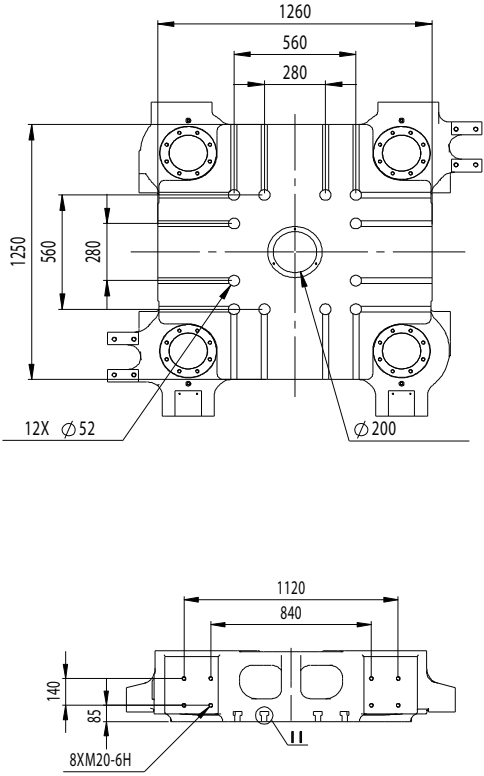
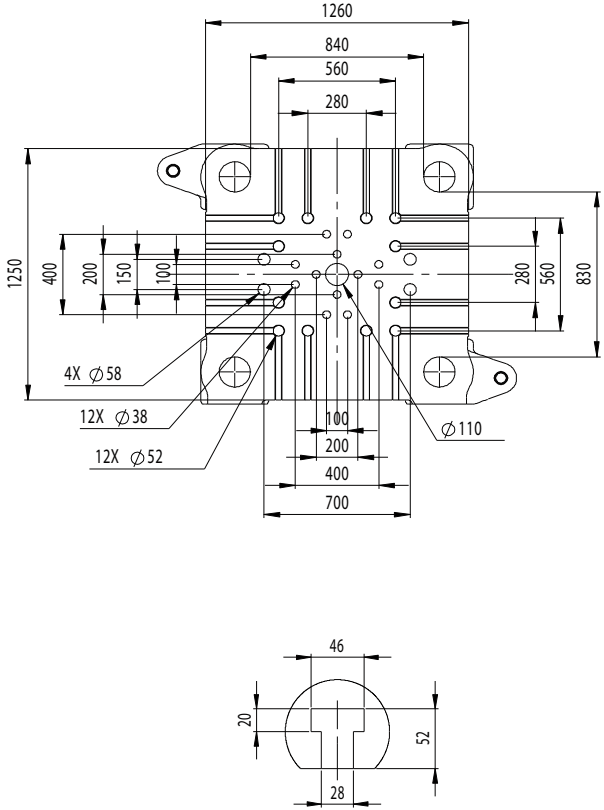
FA450

FA550

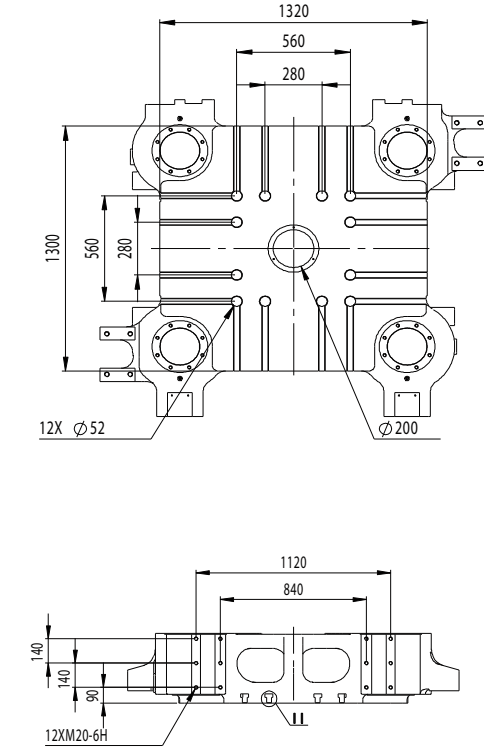
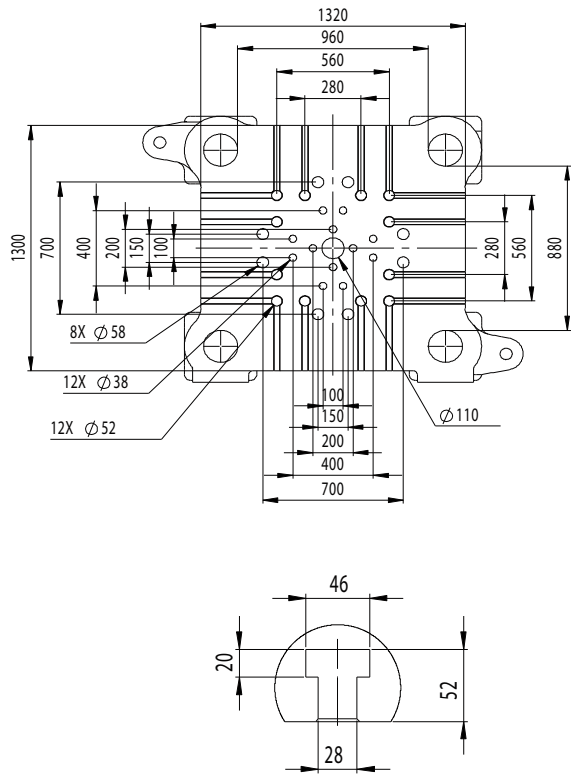
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		Optional	Standard	Optional	Standard
Injection weight (PS)	g	996	1155	1527	1737
	OZ	35	41	54	61
Screw diameter	mm	65	70	75	80
L/D ratio		23	22	24	23
Injection volume	cm³	1094	1269	1678	1909
Injection stroke	mm	330	330	380	380
Screw rpm	r.p.m	166	166	146	146
Plasticizing capacity (Max.)	kg/hr	151	188	203	247
Injection pressure	MPa	219	189	210	185
Injection rate	cm³/s	426	494	499	568
Carriage stroke	mm	460		500	
Carriage contact force	kN	100		100	
Clamping unit					
Clamping force	kN	4500		5500	
Mould thickness (Min.)	mm	350		400	
Mould thickness (Max.)	mm	900		950	
Maximum daylight	mm	1650		1750	
Opening stroke	mm	1300		1350	
Space between tie bars (HxV)	mm	840 x 830		960 x 880	
Ejector stroke	mm	250		250	
Ejector force	kN	160		190	
Number of ejector pins		11		11	
Others					
Pump motor power	kW	74		77	
System pressure	MPa	17.5		17.5	
Oil tank capacity	L	1000		1000	
Heating capacity	kW	25		34	
Temp. control zones		6+N		6+N	
Machine dimensions (LxWxH)	m	8.33 x 2.43 x 2.24		8.58 x 2.56 x 2.29	
Machine weight	ton	20		22	
Minimum mould size	mm	560 x 550		640 x 580	
Mould weight (Fixed platen)	kg	1468		1878	
Mould weight (Moving platen)	kg	2937		3756	

Machine dimension could be changed according to the combination of clamping unit and injection unit, the above dimension is for reference only.
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FA450



FA550



SPECIFICATIONS

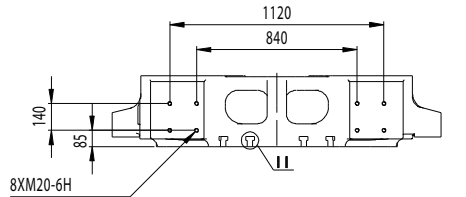
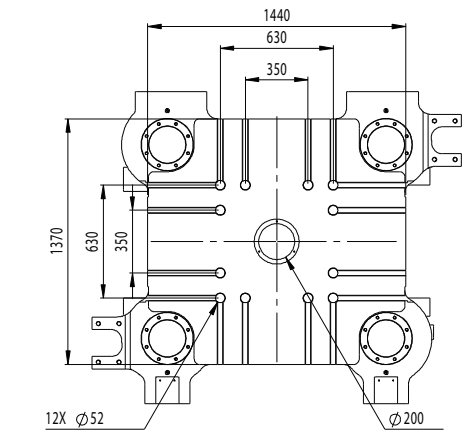
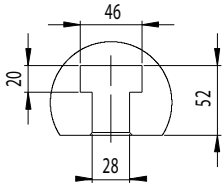
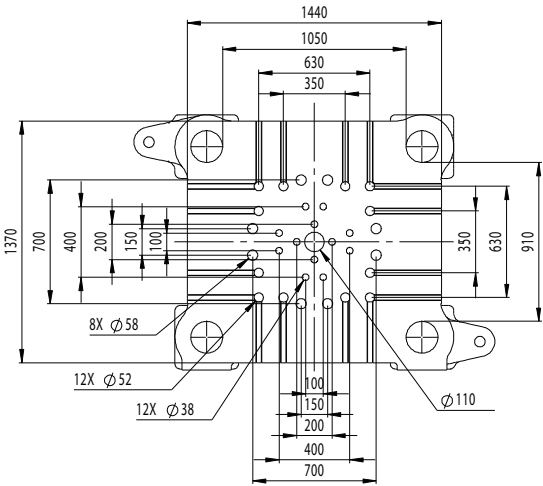
FA650

FA750

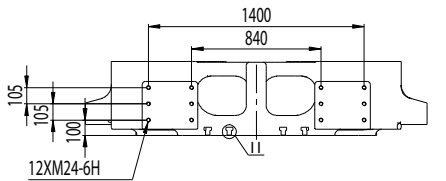
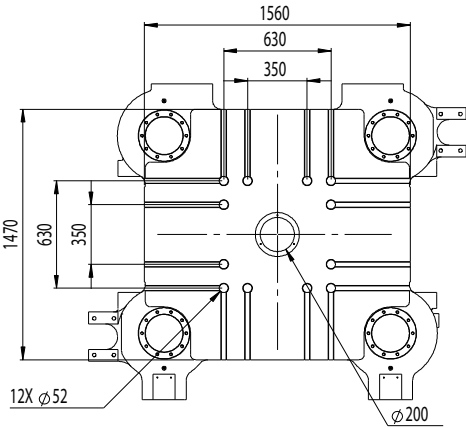
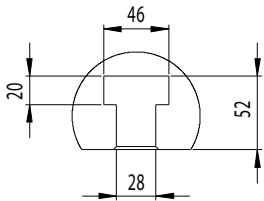
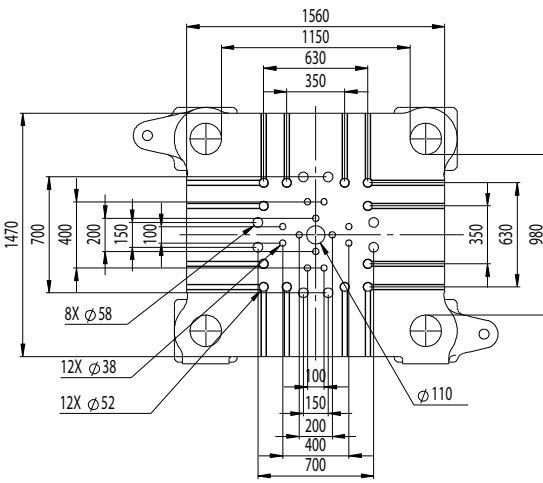
Injection unit	Unit	5000		5000	
		Optional	Standard	Optional	Standard
Injection weight (PS)	g	2271	2546	2271	2546
	OZ	80	90	80	90
Screw diameter	mm	85	90	85	90
L/D ratio		24	22	24	22
Injection volume	cm³	2496	2798	2496	2798
Injection stroke	mm	440	440	440	440
Screw rpm	r.p.m	130	130	131	131
Plasticizing capacity (Max.)	kg/hr	264	313	266	315
Injection pressure	MPa	204	182	204	182
Injection rate	cm³/s	573	642	716	803
Carriage stroke	mm	530		580	
Carriage contact force	kN	100		100	
Clamping unit					
Clamping force	kN	6500		7500	
Mould thickness (Min.)	mm	400		450	
Mould thickness (Max.)	mm	1000		1050	
Maximum daylight	mm	1750		1850	
Opening stroke	mm	1350		1400	
Space between tie bars (HxV)	mm	1050 x 910		1150 x 980	
Ejector stroke	mm	250		300	
Ejector force	kN	190		260	
Number of ejector pins		11		11	
Others					
Pump motor power	kW	80		144	
System pressure	MPa	17.5		17.5	
Oil tank capacity	L	1000		1250	
Heating capacity	kW	41		41	
Temp. control zones		6+N		6+N	
Machine dimensions (LxWxH)	m	8.68 x 2.66 x 2.34		8.99 x 2.90 x 2.39	
Machine weight	ton	27		30	
Minimum mould size	mm	700 x 600		760 x 650	
Mould weight (Fixed platen)	kg	2236		2769	
Mould weight (Moving platen)	kg	4472		5538	

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FA650



FA750



SPECIFICATIONS

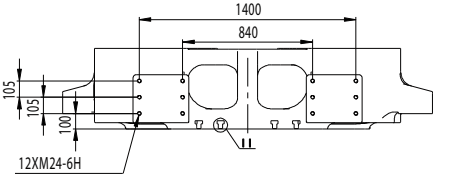
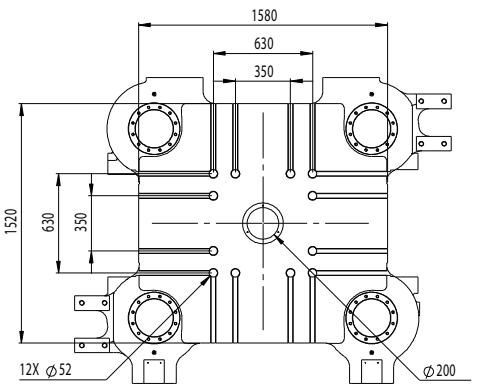
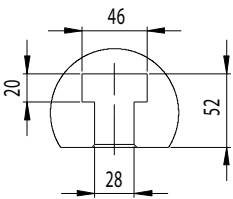
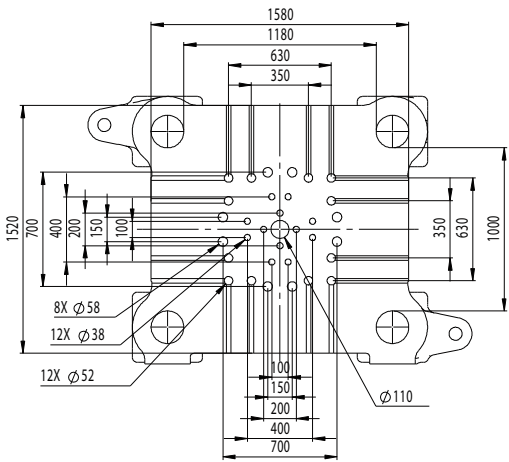
FA900

FA1000

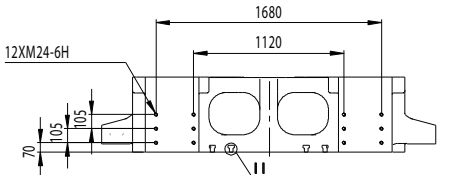
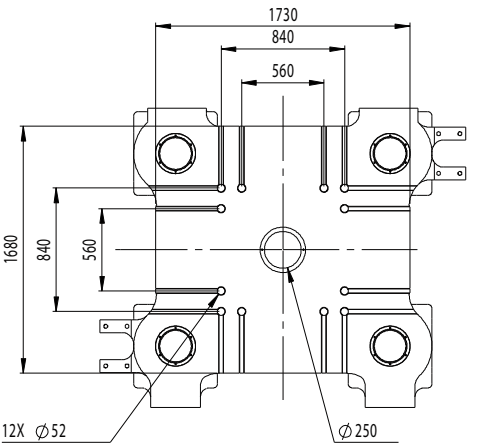
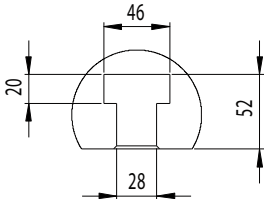
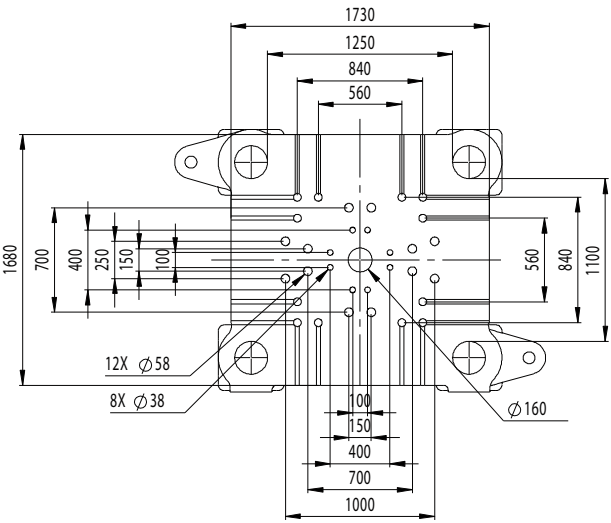
Injection unit	Unit	7400		7400	
		Optional	Standard	Optional	Standard
Injection weight (PS)	g	2893	3572	2893	3572
	OZ	102	126	102	126
Screw diameter	mm	90	100	90	100
L/D ratio		24	22	24	22
Injection volume	cm³	3179	3925	3179	3925
Injection stroke	mm	500	500	500	500
Screw rpm	r.p.m	115	115	115	115
Plasticizing capacity (Max.)	kg/hr	277	380	277	380
Injection pressure	MPa	235	191	235	191
Injection rate	cm³/s	744	918	744	918
Carriage stroke	mm	610		660	
Carriage contact force	kN	130		130	
Clamping unit					
Clamping force	kN	9000		10000	
Mould thickness (Min.)	mm	500		600	
Mould thickness (Max.)	mm	1100		1200	
Maximum daylight	mm	2100		2400	
Opening stroke	mm	1600		1800	
Space between tie bars (HxV)	mm	1180 x 1000		1250 x 1100	
Ejector stroke	mm	300		300	
Ejector force	kN	350		350	
Number of ejector pins		11		13	
Others					
Pump motor power	kW	120		120	
System pressure	MPa	17.5		17.5	
Oil tank capacity	L	1800		1800	
Heating capacity	kW	49		49	
Temp. control zones		6+N		7+N	
Machine dimensions (LxWxH)	m	10.16 x 3.02 x 2.43		10.85 x 3.36 x 2.47	
Machine weight	ton	38		48	
Minimum mould size	mm	780 x 660		830 x 730	
Mould weight (Fixed platen)	kg	3037		3861	
Mould weight (Moving platen)	kg	6075		7722	

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FA900



FA1000



SPECIFICATIONS

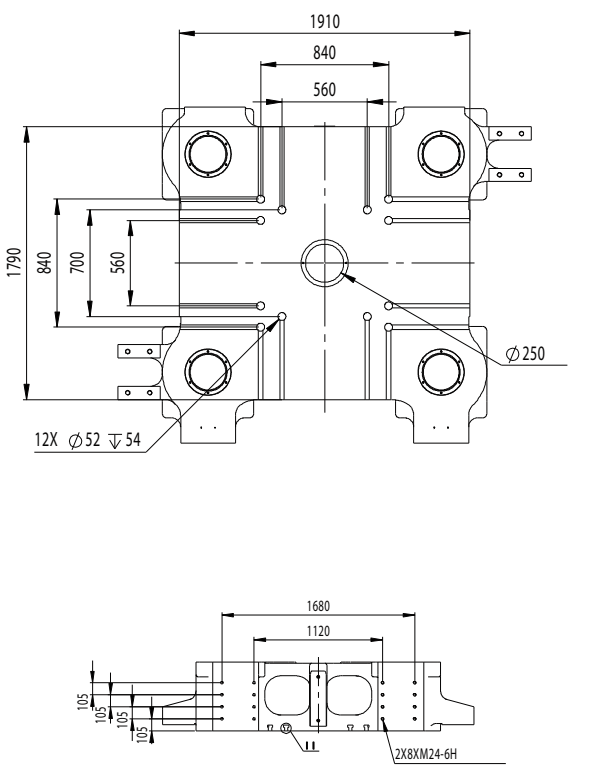
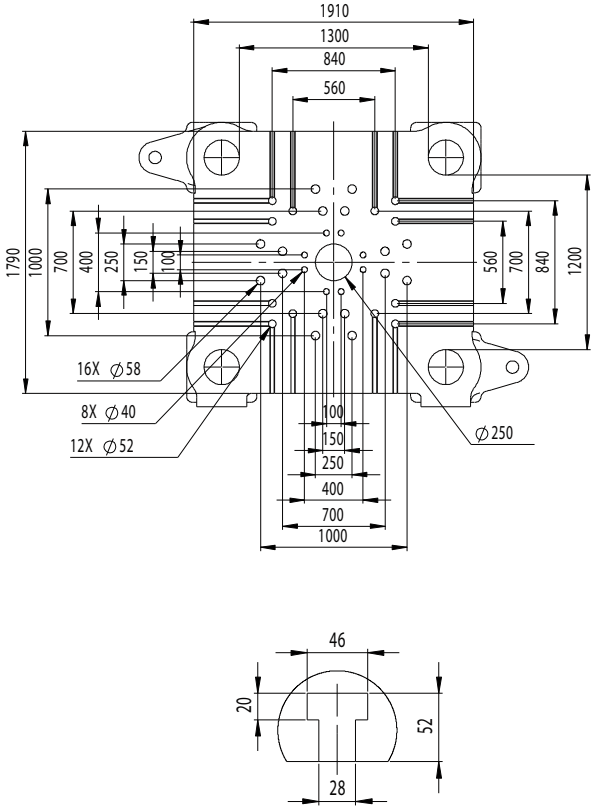
FA1200

FA1400

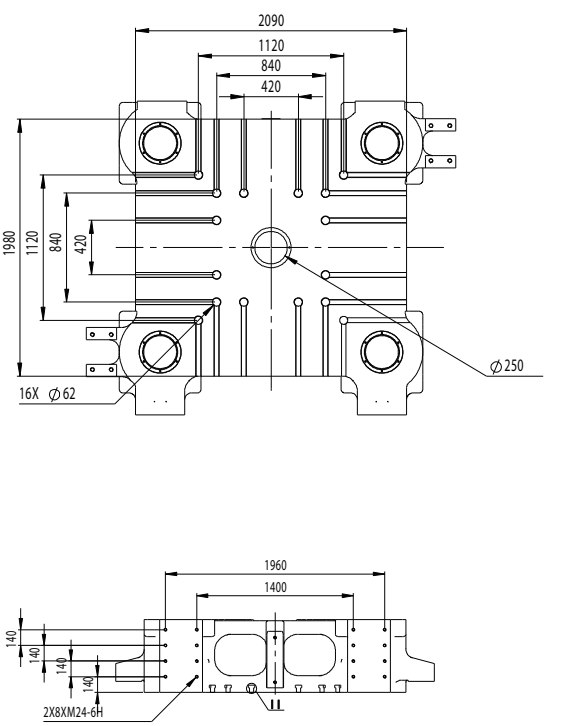
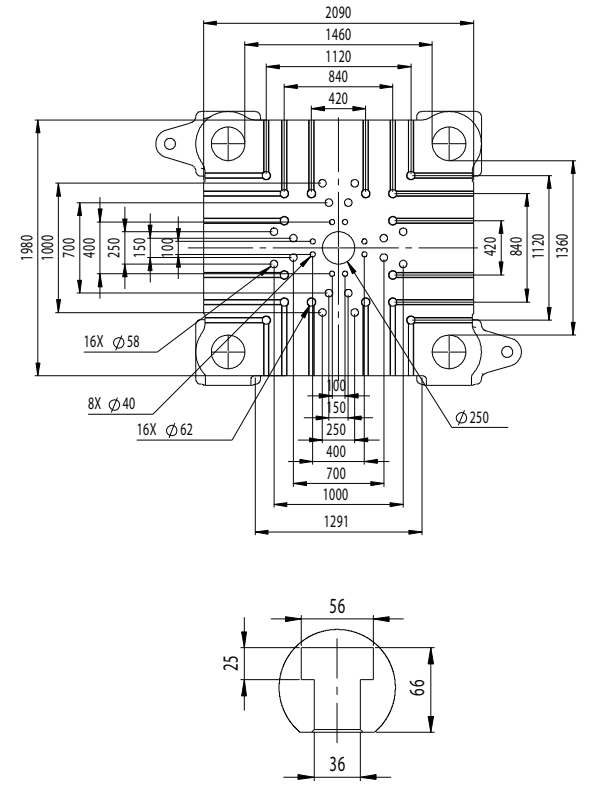
Injection unit	Unit	9200		11900	
		Optional	Standard	Optional	Standard
Injection weight (PS)	g	3929	4754	5186	6172
	OZ	139	168	183	218
Screw diameter	mm	100	110	110	120
L/D ratio		24	22	24	22
Injection volume	cm³	4318	5224	5699	6782
Injection stroke	mm	550	550	600	600
Screw rpm	r.p.m	109	109	100	100
Plasticizing capacity (Max.)	kg/hr	360	479	440	571
Injection pressure	MPa	214	177	209	175
Injection rate	cm³/s	1020	1235	1047	1247
Carriage stroke	mm	820		820	
Carriage contact force	kN	130		130	
Clamping unit					
Clamping force	kN	12000		14000	
Mould thickness (Min.)	mm	600		700	
Mould thickness (Max.)	mm	1300		1450	
Maximum daylight	mm	2700		3100	
Opening stroke	mm	2100		2400	
Space between tie bars (HxV)	mm	1300 x 1200		1460 x 1360	
Ejector stroke	mm	400		400	
Ejector force	kN	490		490	
Number of ejector pins		13		13	
Others					
Pump motor power	kW	216		216	
System pressure	MPa	17.5		17.5	
Oil tank capacity	L	1800		1800	
Heating capacity	kW	54		72	
Temp. control zones		7+N		7+N	
Machine dimensions (LxWxH)	m	12.19 x 3.50 x 2.77		12.39 x 3.70 x 3.03	
Machine weight	ton	66		74	
Minimum mould size	mm	860 x 800		970 x 900	
Mould weight (Fixed platen)	kg	4746		6737	
Mould weight (Moving platen)	kg	9491		13474	

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FA1200



FA1400



SPECIFICATIONS

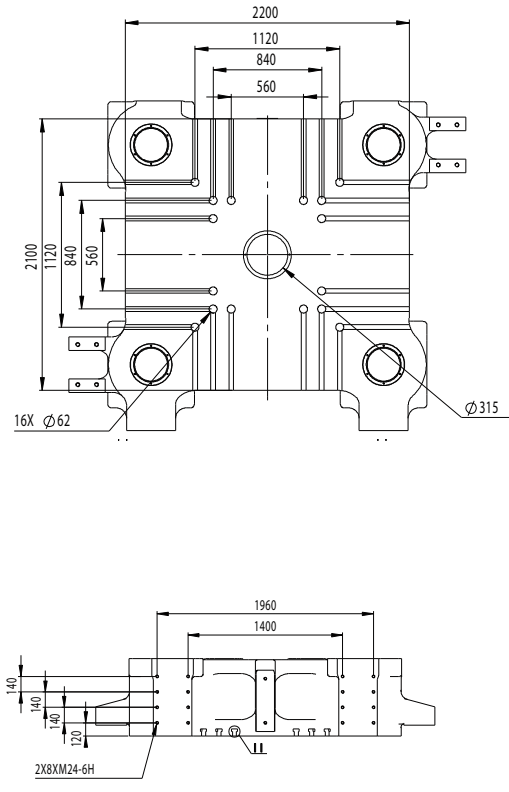
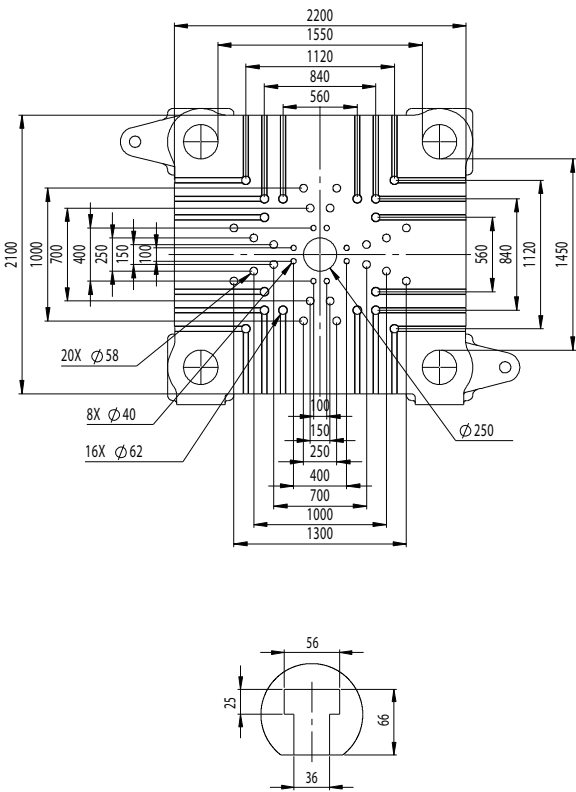
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FA1800

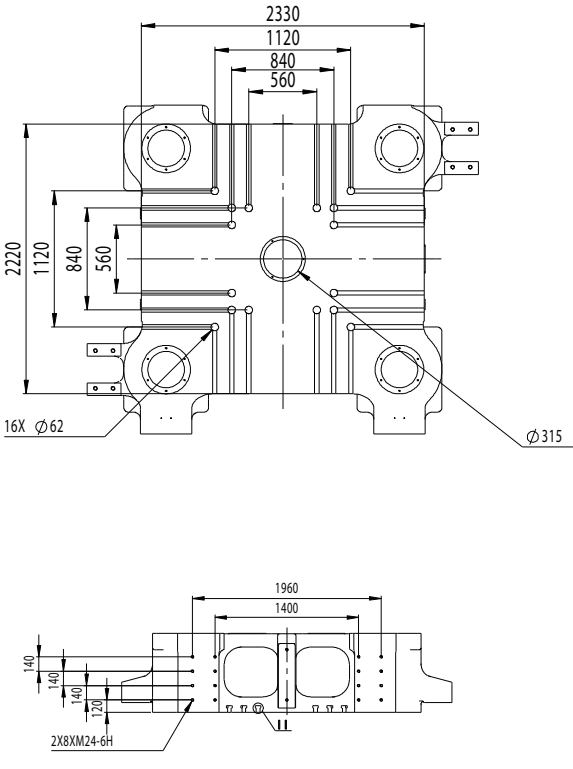
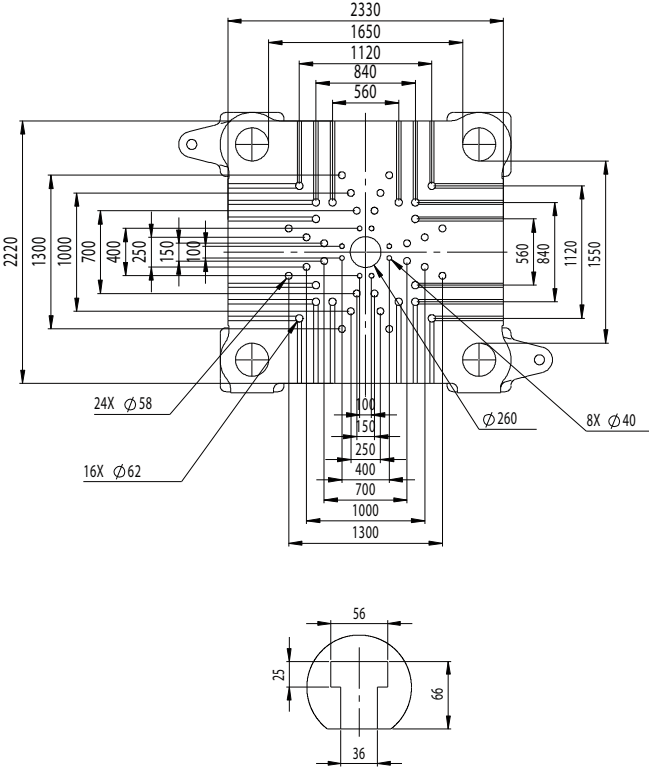
Injection unit	Unit	16300		16300	
		Optional	Standard	Optional	Standard
Injection weight (PS)	g	7534	8788	7534	8788
	OZ	266	310	266	310
Screw diameter	mm	125	135	125	135
L/D ratio		24	22	24	22
Injection volume	cm³	8279	9657	8279	9657
Injection stroke	mm	675	675	675	675
Screw rpm	r.p.m	90	90	90	90
Plasticizing capacity (Max.)	kg/hr	581	732	581	732
Injection pressure	MPa	198	169	198	169
Injection rate	cm³/s	1107	1291	1107	1291
Carriage stroke	mm	820		820	
Carriage contact force	kN	130		130	
Clamping unit					
Clamping force	kN	16000		18000	
Mould thickness (Min.)	mm	700		750	
Mould thickness (Max.)	mm	1550		1600	
Maximum daylight	mm	3300		3400	
Opening stroke	mm	2600		2650	
Space between tie bars (HxV)	mm	1550 x 1450		1650 x 1550	
Ejector stroke	mm	400		450	
Ejector force	kN	490		660	
Number of ejector pins		17		17	
Others					
Pump motor power	kW	216		216	
System pressure	MPa	17.5		17.5	
Oil tank capacity	L	1800		1800	
Heating capacity	kW	82		82	
Temp. control zones		7+N		7+N	
Machine dimensions (LxWxH)	m	12.95 x 3.79 x 3.16		13.42 x 3.95 x 3.31	
Machine weight	ton	88		98	
Minimum mould size	mm	1030 x 960		1100 x 1030	
Mould weight (Fixed platen)	kg	8152		9575	
Mould weight (Moving platen)	kg	16303		19151	

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FA1600



FA1800



SPECIFICATIONS

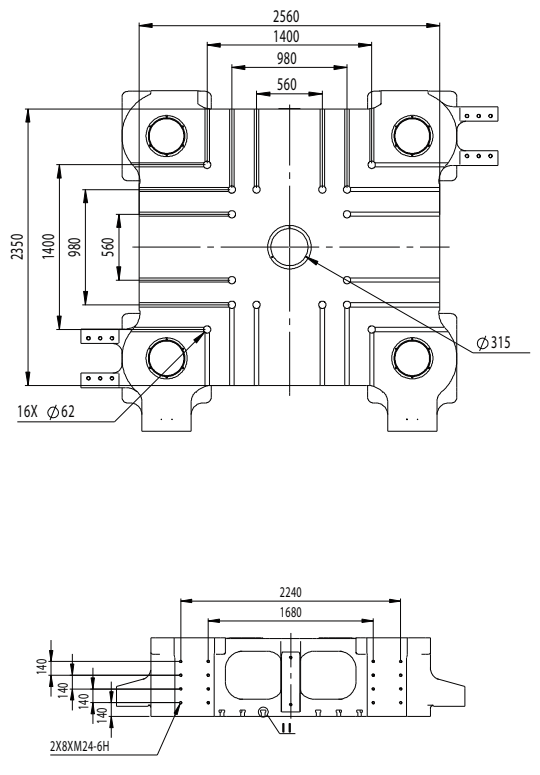
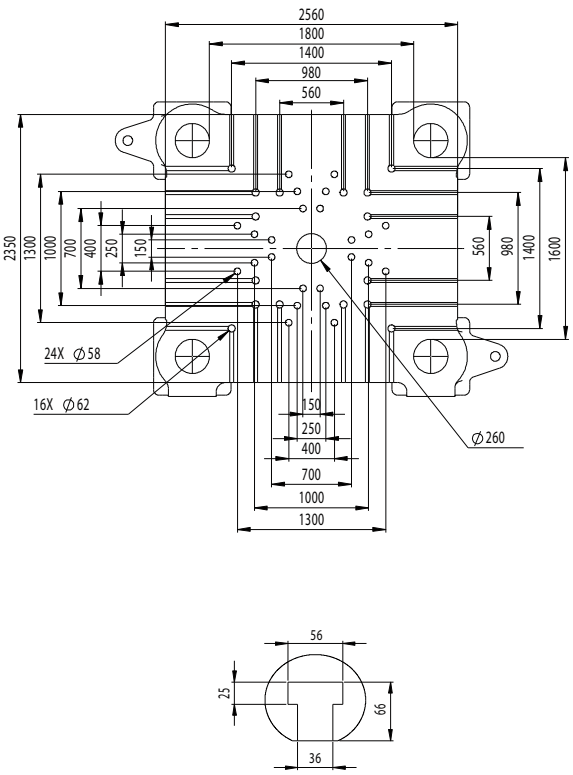
FA2000

FA2500

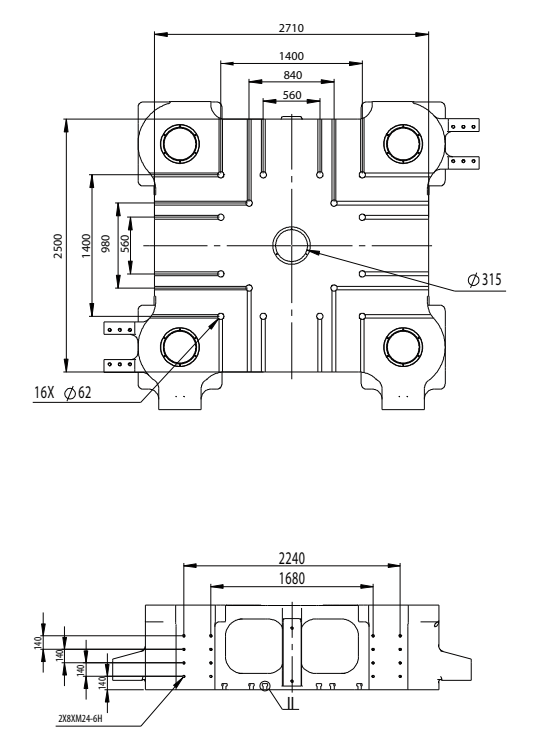
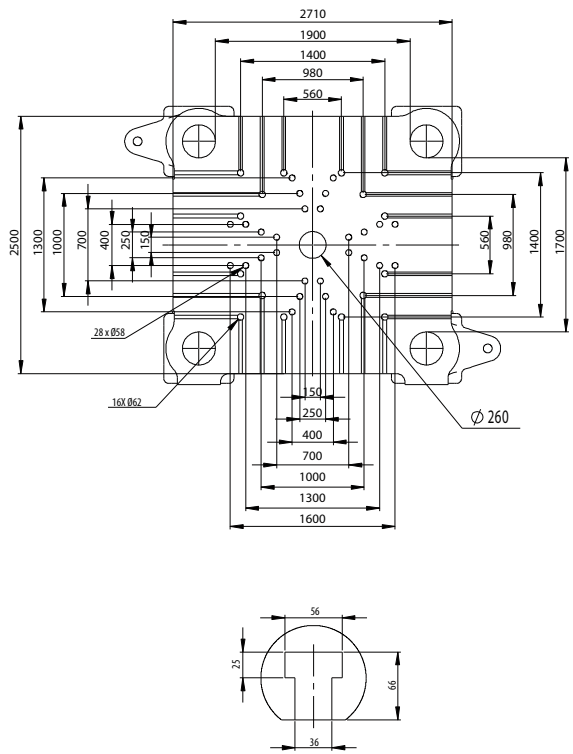
Injection unit	Unit	25300		25300	
		Optional	Standard	Optional	Standard
Injection weight (PS)	g	11201	12858	11201	12858
	OZ	395	454	395	454
Screw diameter	mm	140	150	140	150
L/D ratio		24	22	24	22
Injection volume	cm³	12309	14130	12309	14130
Injection stroke	mm	800	800	800	800
Screw rpm	r.p.m	79	79	79	79
Plasticizing capacity (Max.)	kg/hr	716	881	716	881
Injection pressure	MPa	206	179	206	179
Injection rate	cm³/s	1418	1628	1418	1628
Carriage stroke	mm	900		1030	
Carriage contact force	kN	200		130	
Clamping unit					
Clamping force	kN	20000		25000	
Mould thickness (Min.)	mm	800		800	
Mould thickness (Max.)	mm	1700		1800	
Maximum daylight	mm	3600		3800	
Opening stroke	mm	2800		3000	
Space between tie bars (HxV)	mm	1800 x 1600		1900 x 1700	
Ejector stroke	mm	450		550	
Ejector force	kN	660		660	
Number of ejector pins		17		17	
Others					
Pump motor power	kW	288		288	
System pressure	MPa	17.5		17.5	
Oil tank capacity	L	2500		2500	
Heating capacity	kW	99		99	
Temp. control zones		7+N		7+N	
Machine dimensions (LxWxH)	m	14.46 x 4.32 x 3.49		15.12 x 4.36 x 3.65	
Machine weight	ton	115		143	
Minimum mould size	mm	1200 x 1060		1260 x 1130	
Mould weight (Fixed platen)	kg	11457		13605	
Mould weight (Moving platen)	kg	22913		27210	

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FA2000



FA2500



SPECIFICATIONS

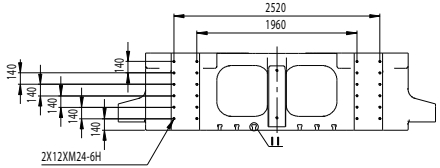
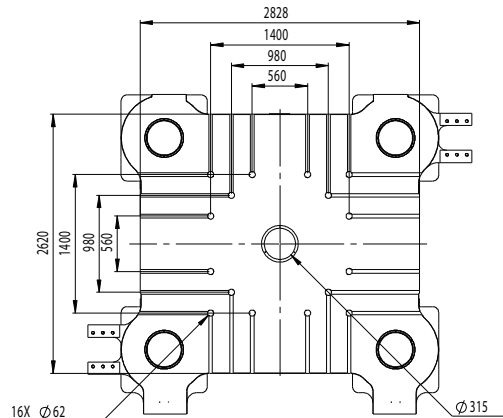
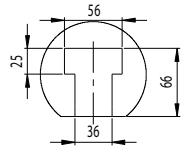
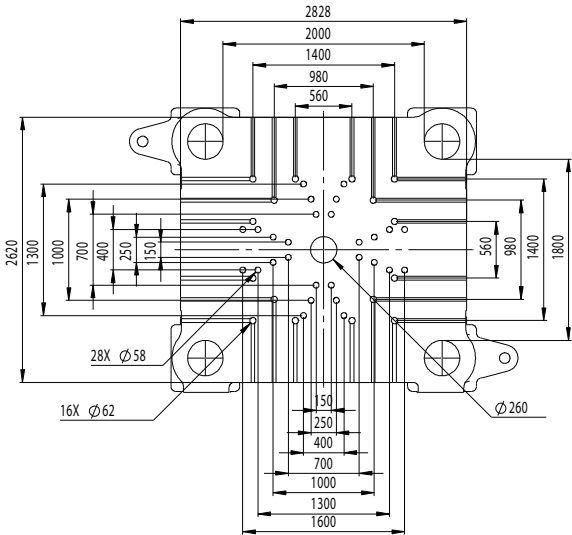
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FA3500

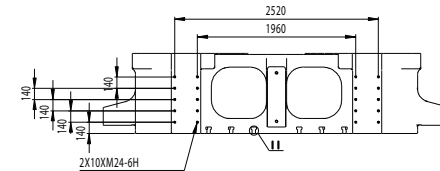
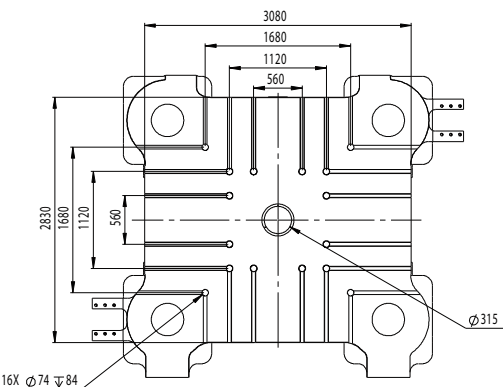
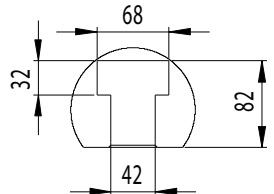
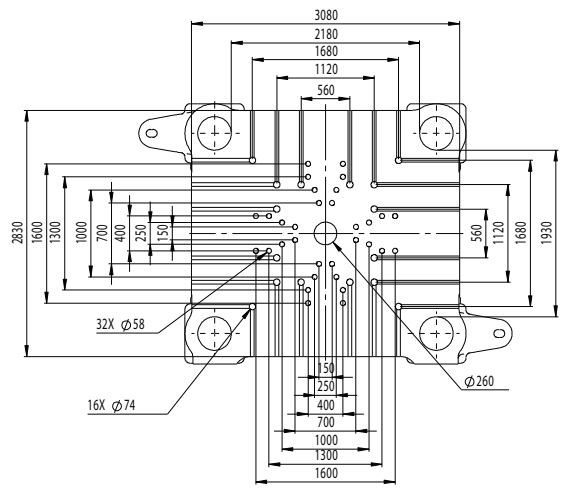
Injection unit	Unit	33700		64000	
		Optional	Standard	Optional	Standard
Injection weight (PS)	g	16001	18064	30946	34289
	OZ	564	637	1092	1210
Screw diameter	mm	160	170	190	200
L/D ratio		23	22	25	24
Injection volume	cm³	17584	19851	34006	37680
Injection stroke	mm	875	875	1200	1200
Screw rpm	r.p.m	72	72	69	69
Plasticizing capacity (Max.)	kg/hr	974	1169	1564	1824
Injection pressure	MPa	192	170	188	170
Injection rate	cm³/s	1519	1715	1935	2144
Carriage stroke	mm	1030		1250	
Carriage contact force	kN	200		280	
Clamping unit					
Clamping force	kN	30000		35000	
Mould thickness (Min.)	mm	900		1000	
Mould thickness (Max.)	mm	1900		2200	
Maximum daylight	mm	4100		4200	
Opening stroke	mm	3200		3200	
Space between tie bars (HxV)	mm	2000 x 1800		2180 x 1930	
Ejector stroke	mm	550		550	
Ejector force	kN	660		660	
Number of ejector pins		17		17	
Others					
Pump motor power	kW	288		360	
System pressure	MPa	17.5		17.5	
Oil tank capacity	L	2500		3200	
Heating capacity	kW	131		220	
Temp. control zones		7+N		7+N	
Machine dimensions (LxWxH)	m	16.31 x 4.47 x 3.84		17.34 x 4.77 x 4.07	
Machine weight	ton	165		200	
Minimum mould size	mm	1330 x 1200		1450 x 1280	
Mould weight (Fixed platen)	kg	16006		21660	
Mould weight (Moving platen)	kg	32011		43319	

Machine dimension could be changed according to the combination of clamping unit and injection unit, the above dimension is for reference only.
We reserve the right to make any technical improvements without further notice.

FA3000



FA3500



SPECIFICATIONS

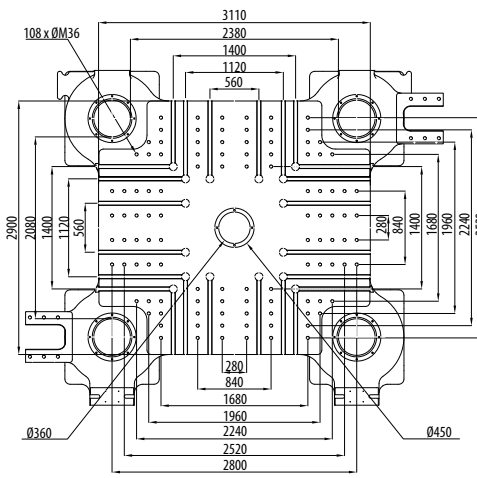
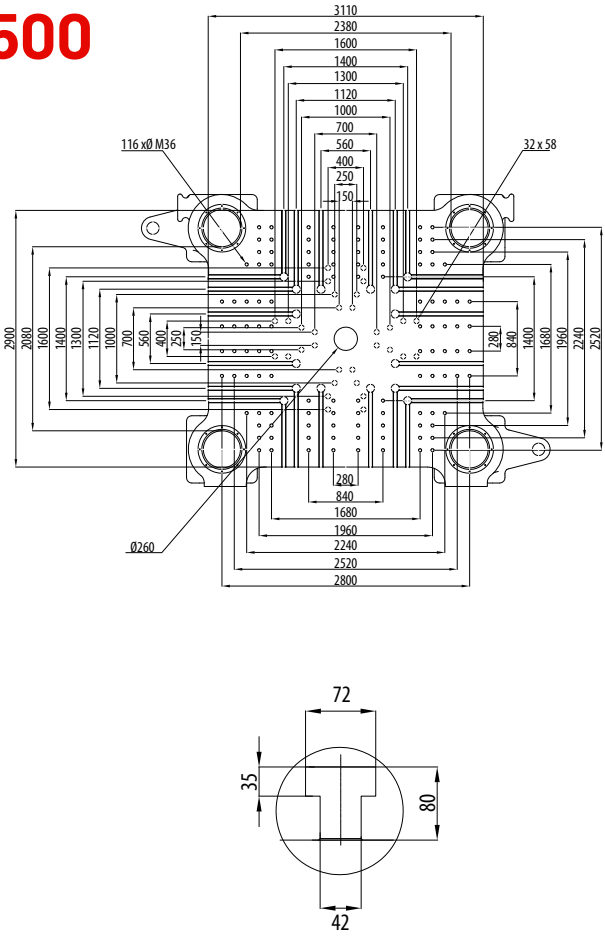
FA4500

FA5500

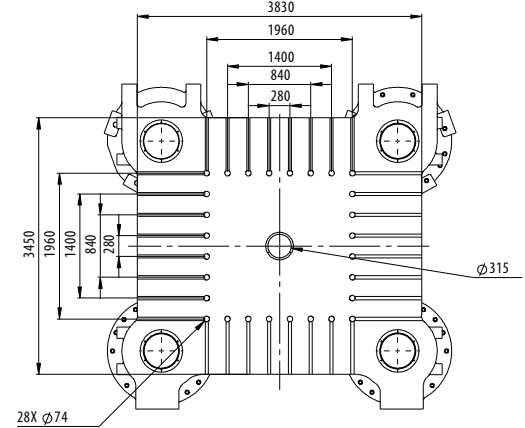
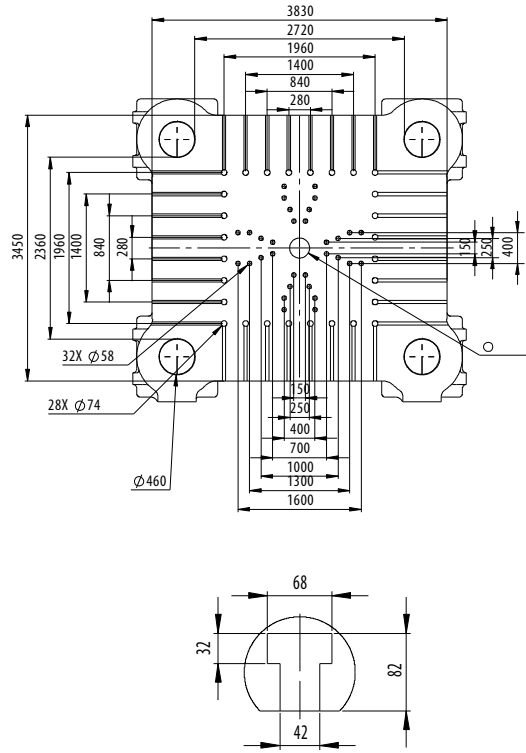
Injection unit	Unit	105600		115500	
		Optional	Standard	Optional	Standard
Injection weight (PS)	g	55548	60273	60273	65192
	OZ	1959	2126	2126	2300
Screw diameter	mm	240	250	250	260
L/D ratio		24	23	25	24
Injection volume	cm³	61042	66234	66234	71639
Injection stroke	mm	1350	1350	1350	1350
Screw rpm	r.p.m	49	49	42	42
Plasticizing capacity (Max.)	kg/hr	1440	1628	1395	1570
Injection pressure	MPa	173	160	174	161
Injection rate	cm³/s	2948	3199	3364	3638
Carriage stroke	mm	1400		2000	
Carriage contact force	kN	280		280	
Clamping unit					
Clamping force	kN	45000		55000	
Mould thickness (Min.)	mm	1100		1000	
Mould thickness (Max.)	mm	2150		2400	
Maximum daylight	mm	4600		5000	
Opening stroke	mm	3500		4000	
Space between tie bars (HxV)	mm	2380 x 2080		2720 x 2360	
Ejector stroke	mm	550		650	
Ejector force	kN	660		850	
Number of ejector pins		17		17	
Others					
Pump motor power	kW	503		503	
System pressure	MPa	17.5		17.5	
Oil tank capacity	L	4500		4500	
Heating capacity	kW	245		270	
Temp. control zones		7+N		8+N	
Machine dimensions (LxWxH)	m	19.9 x 8 x 4.56		20.45 x 6.35 x 5.80	
Machine weight	ton	260		380	
Minimum mould size	mm	1580 x 1380		1810 x 1570	
Mould weight (Fixed platen)	kg	24905		36050	
Mould weight (Moving platen)	kg	49811		72100	

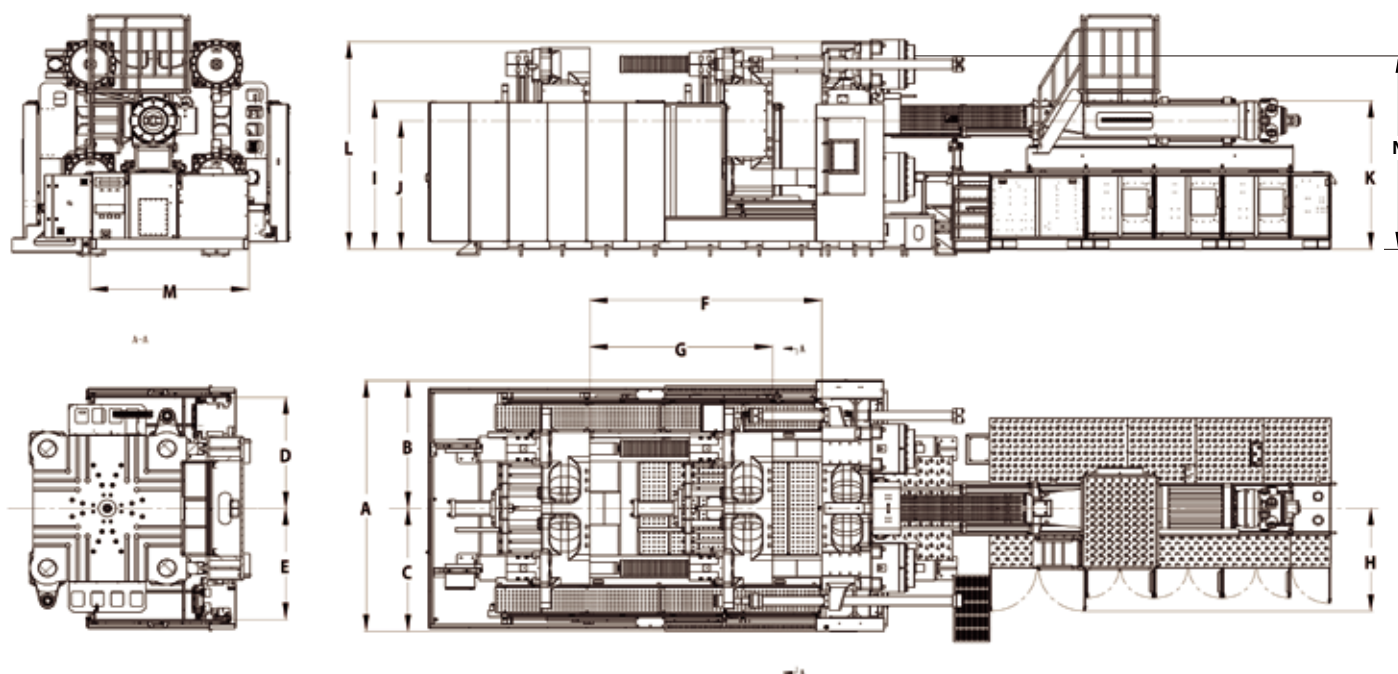
Machine dimension could be changed according to the combination of clamping unit and injection unit, the above dimension is for reference only.
We reserve the right to make any technical improvements without further notice.

FA4500



FA5500





Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N
FA450	2422	1222	1200	1082	1082	1650	1300	1461	2155	1500	1690	2235	2062	2055
FA550	2556	1286	1270	1152	1152	1750	1350	1461	2200	1500	1700	2290	2062	2100
FA650	2652	1332	1320	1202	1202	1750	1350	1461	2205	1500	1730	2335	2062	2125
FA750	2892	1452	1440	1322	1322	1850	1400	1498	2240	1500	1730	2385	2199	2170
FA900	3020	1510	1510	1392	1392	2100	1600	1493	2280	1500	1730	2425	2137	2360
FA1000	3108	1731	1585	1583	1436	2400	1800	1493	2140	1500	1730	2465	2139	2477
FA1200	3491	1783	1708	1530	1530	2700	2100	1549	2232	1739	2039	2764	2260	2538
FA1400	3691	1883	1812	1632	1632	3100	2400	1549	2232	1865	2170	2995	2260	2758
FA1600	3781	1928	1853	1675	1675	3300	2600	1549	2232	1949	2240	3130	2260	2930
FA1800	3941	2008	1933	1756	1756	3400	2650	1549	2232	2000	2305	3265	2260	3045
FA2000	4311	2193	2118	1941	1941	3600	2800	1579	2232	2125	2485	3455	2321	3195
FA2500	4357	2216	2141	1964	1964	3800	3000	1579	2232	2185	2545	3611	2321	3345
FA3000	4467	2271	2196	2019	2019	4100	3200	1597	2232	2280	2615	3790	2311	3500
FA3500	4767	2421	2346	2169	2169	4200	3200	1830	2232	2380	3260	4010	2833	3705

Standard features

Features

Injection unit

- 1 Screw cold start protection
- 2 Double layers barrel protection cover
- 3 Barrel support
- 4 10 stages injection velocity/pressure control
- 5 10 stages holding velocity/pressure control
- 6 5 stages metering velocity/pressure control
- 7 5 stages metering backpressure control
- 8 3 stages carriage forward velocity/pressure control
- 9 3 stages carriage backward velocity/pressure control
- 10 Pressure-holding position/time control
- 11 Injection position transducer
- 12 Carriage position transducer
- 13 Injection screw with linear guide rails
- 14 Carriage with linear guide rails
- 15 Proportional backpressure control
- 16 Carriage movement with time/position control
- 17 Material loading platform (For model FA1000 and above)
- 18 Nozzle safety cover
- 19 Auto purge function
- 20 Material feeding throat temperature display
- 21 Ceramic heater band
- 22 Individual temperature control for nozzle

Clamping unit

- 1 5 stages mold opening/closing velocity/pressure control
- 2 Mold protection control
- 3 Automatic mold height adjustment
- 4 Regenerative mold opening circuit
- 5 Electrical/hydraulic safety interlock for clamping
- 6 Front safety door controlled by servo-motor (For models FA1000 and above)
- 7 Non-operation side safety door lock (For models FA1000 and above)
- 8 Standard T-slot for mold mounting
- 9 Moving platen sidewalk and molding area safety platform (For models FA1000 and above)
- 10 2 sets of core pulling (For models FA450~750)
- 11 4 sets of core pulling (For models FA900 and above)
- 12 3 stages ejector velocity/pressure control
- 13 Velocity, pressure and position control for ejection
- 14 Mold ejector backward end input
- 15 Moving platen position transducer
- 16 Ejector position transducer
- 17 Ejector or core-pulling parallel with mold opening

Control unit

- 1 European Keba 2000 professional control system
- 2 12" control panel
- 3 2 colors alarm indicator
- 4 Mold parameters storage on RAM/USB
- 5 16A industrial power sockets (2pcs for FA450~900, 3pcs for FA1000 and above)
- 6 Residential earth leakage circuit breaker for power sockets
- 7 Hard-copy printout interface
- 8 Oil cooled motor servo-drive
- 9 Complied with CE Machinery Directive

Hydraulic unit

- 1 Low oil level alarm
- 2 Oil temperature alarm
- 3 Cooling water regulators (6 sets on fixed and moving platen for FA450~900; 10 sets on fixed and moving platen for FA1000 and above)

Optional features

Injection unit

- 1 Bi-metallic injection screw and barrel set
- 2 Hard chrome plated injection screw set
- 3 Hydraulic/pneumatic shutoff nozzle
- 4 Nozzle static mixer
- 5 Proportional injection speed control
- 6 Metering parallel with mold opening by electric servo motor
- 7 6/8/10/12/16/18/24 sets of sequential injection control (Hydraulic/pneumatic)
- 8 Air booster for pneumatic sequential valve control
- 9 Heating controlled by solid state relay
- 10 Holding switchover by cavity pressure (Sensor not included)
- 11 Carriage contact force limit control
- 12 Stainless steel hopper
- 13 Hopper dryer
- 14 Material automatic loading device
- 15 Material loading platform (For model FA450~900)

Hydraulic unit

- 1 Cooling water regulators with quick coupling
- 2 Filter clogging switch and alarm
- 3 Directional valve solenoid with LED
- 4 Oil temperature control (Cooling water solenoid valve + thermocouple)
- 5 Oil temperature preheating circuit

Clamping unit

- 1 Proportional mold opening and closing control
- 2 Euromap 2 mold locating ring (For fixed and moving platen)
- 3 Euromap 18 handling equipment mechanical interface
- 4 6/8/12/16/24/32/36/48/64 sets hot runner control by solid state relay (16A maximum)
- 5 Core pulling with check valve
- 6 Core puller with quick coupling
- 7 Pressure relief circuit for core pulling
- 8 Pressure holding for core pulling (Separated pump set)
- 9 Extra core puller
- 10 Airblow device
- 11 Air booster for airblow
- 12 Ejector with check valve
- 13 Ejector quick coupling with mold (Mechanical/pneumatic)
- 14 Magnetic mold platen
- 15 Hydraulic quick mold change device (with power pack and console)
- 16 Front safety door controlled by servo-motor (For models FA450~900)
- 17 Non-operation side safety door lock (For models FA450~900)
- 18 Linear guide rails for mold support (For Tandem/Stack/Cube mold)
- 19 Water/Oil type mold temperature controller
- 20 Air/water cooled type chiller
- 21 Handling equipment robot

Control unit

- 1 Keba 5000 control system
- 2 Keba 8000 control system
- 3 15" control panel (For Keba 2000 and 5000 control system)
- 4 21" control panel (Keba 8000 control system only)
- 5 CANOpen digital transducer for mold platen position
- 6 CANOpen digital transducer for high-pressure locking position
- 7 CANOpen digital transducer for injection position
- 8 CANOpen digital transducer for ejector position
- 9 CANOpen digital transducer for carriage position
- 10 Euromap 12 handling device robot electrical interface
- 11 Euromap 13 core pullers electrical interface
- 12 Euromap 14 hot-runner thermocouple and heating electrical interface
- 13 Euromap 62 fluid injector system electrical interface
- 14 Euromap 67 handling device robot electrical interface
- 15 Euromap 70 magnetic clamping system electrical interface
- 16 Euromap 71 mold changing device electrical interface
- 17 Energy consumption meter
- 18 Low/High voltage and phase monitor device
- 19 Barrel heater broken detection device
- 20 Hot-runner heater broken detection device
- 21 Water cooled heat exchanger for cabinet
- 22 Cabinet air-conditioning device
- 23 LED light for cabinet
- 24 Control circuit UPS device (1kVA)
- 25 16A industrial power socket
- 26 32A industrial power socket
- 27 63A industrial power socket
- 28 Tandem mold processing software
- 29 3 colors alarm indicator
- 30 Visual device for mold protection